

IN THE CLAIMS:

Please cancel claims 1-4.

1-4 (Cancelled)

5. (Currently Amended) A process for operating a plurality of nodes through a configured data bus wherein said nodes are in communication with one another through said configured data bus, said method comprising the steps of:

connecting at least one of said nodes through ~~a light guide~~ an optical transmission segment to said data bus configuration;

providing synchronizing pulses to synchronize each of said nodes;

transmitting information signals from said nodes with a hierarchical transmission sequence including the step of starting transmission of said information signals so that said information ~~elements~~ signals are independent of any one of said nodes and wherein said starting transmission has a start time which is solely a function of said ~~hierarchical~~ hierarchical transmission sequence.


6. (Original) Process according to claim 5, wherein the transmission start time for an information element for a predetermined node is set to be later than when said predetermined node had previously received an information element from another one of said nodes.

7. (Currently Amended) Process according to claim 5, further comprising the step of setting a delay time for each node within one cycle of said transmission sequence wherein ~~the~~ a length of said delay time is complimentary to a signal transit time between a predetermined node and said data bus.

8. (Currently Amended) The process according to claim 5 7, wherein the delay time is a function of ~~the~~ a type of connection between a node and the data bus.

9. (Currently Amended) A system for providing communication between a data bus and a plurality of nodes wherein said nodes are connected to each other through said data bus;

~~a light guide~~ an optical transmission segment for connecting at least one of said nodes to said data bus;

 means for providing synchronizing pulses to synchronize the operation of said at least one node when information elements are transmitted from said nodes with a hierarchical transmission sequence;

adaptation element for providing start time points of said information element whereby said start time points are independent of any one node and are only a function of said hierarchical transmission sequence.

10. (Original) The system according to claim 9, wherein said adaptation elements further set a transmission time for an information element when a predetermined node has previously transmitted and wherein said transmission time point is set later than when said predetermined node previously received an information element from another node.

11. (Original) The system according to claim 9, wherein said adaptation elements set a delay time for each cycle of transmission sequence for each node wherein the length of said delay time is complimentary to the signal transit time between each node and the data bus.

12. (Currently Amended) The system according to claim 11, wherein
the delay time is a function of ~~the~~ a type of connection between a node and the data
bus.
